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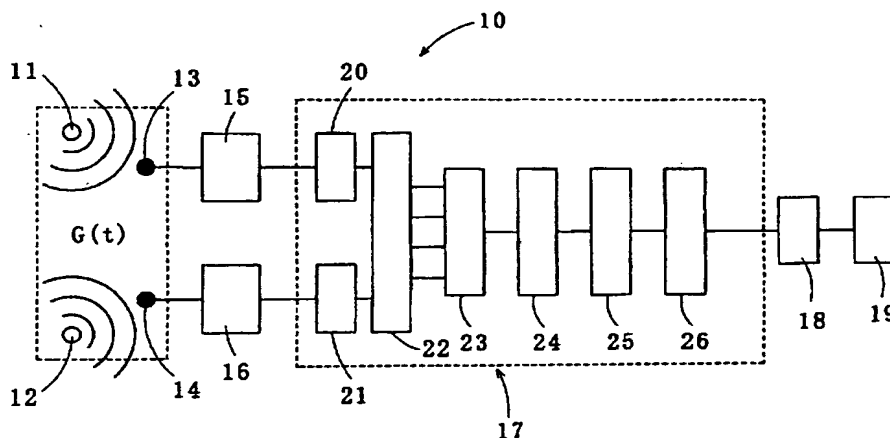neering, 11-6, Kayanomori, Iizuka-shi, Fukuoka, 8208555
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(54) Title: A METHOD FOR RECOVERING TARGET SPEECH BASED ON SPEECH SEGMENT DETECTION UNDER A
STATIONARY NOISE

(57) Abstract: Method for recovering target speech by extracting signal components falling in a speech segment, which is deter-
mined based on separated signals obtained through the Independent Component Analysis, thereby minimizing the residual noise in
the recovered target speech. The present method comprises: the first step of receiving target speech emitted from a sound source
and a noise emitted from another sound source and extracting estimated spectra Y* corresponding to the target speech by use of the
Independent Component Analysis; the second step of separating from the estimated spectra Y* an estimated spectrum series group
y* in which the noise is removed by applying separation judgment criteria based on the kurtosis of the amplitude distribution of each
of estimated spectrum series in Y*; the third step of detecting a speech segment and a noise segment of the total sum F of all the es-
timated spectrum series in y* by applying detection judgment criteria based on a predetermined threshold value T that is determined
by the maximum value of F; and the fourth step of extracting components falling in the speech segment from the estimated spectra
Y* to generate a recovered spectrum group of the target speech for recovering the target speech.

PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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